

REMARKS

I. Status of Claims

After the above amendments, claims 1-6 are pending. Claims 1 and 4 are independent.

II. Rejections under 35 U.S.C. § 102(e) over NAGASAWA et al. (US 6,965,950 B1)

The Examiner rejected claims 1 and 3-5 under 35 U.S.C. § 102(e) as being unpatentable over NAGASAWA et al. (US 6,965,950 B1). Applicant respectfully requests reconsideration of the rejections because NAGASAWA et al. does not disclose or suggest all of the limitations of the claims. Starting with the Applicant's invention of independent claim 1, the claim requires:

1. A portable terminal communicably coupled to an external accessory, the external accessory being one of a plurality of external accessories, each of the plurality of external accessories being a different type and having differing functions, wherein at least one of the plurality of external accessories comprises an earphone having an earphone function, wherein each of the plurality of external accessories comprises a resistance value that corresponds to a type of external accessory, comprising:

an earjack comprising a plurality of communicable contacts for communicably coupling the external accessory via two or more of the plurality contacts, wherein a number of contacts used and a usage of each contact varies depending on the type of the communicably coupled external accessory, and further wherein one of the two or more contacts is an analog-to-digital conversion (ADC) contact used exclusively for detecting a resistance value of the communicably coupled external accessory;

an ADC section for converting a resistance value of the communicably coupled external accessory into an ADC value;

a memory for storing ADC reference values that correspond to resistance values of the plurality of external accessories; and

a controller for controlling the ADC section to convert the resistance value of the communicably coupled external accessory into an ADC value, determining the type of the communicably coupled external accessory by comparing the converted ADC value with the ADC reference values stored in the memory, controlling the number and usage of the plurality of contacts to correspond to the communicably coupled external accessory, and performing a function of the communicably coupled external accessory (emphasis added).

NAGASAWA et al. teaches an interfacing technique for a camcorder that allows one of a plurality of differing camcorder peripheral devices to communicate via either a LANC or the RS-232C signal through a camcorder communications jack with a corresponding LANC or the RS-232C interface comprised by the camcorder, wherein LANC or the RS-232C communications use a different number of signal lines. NAGASAWA et al. only discloses LANC or the RS-232C signals being communicated via the jack and these signals are only used to communicate data and/or control information. Further, NAGASAWA et al. determines the signal type (LANC or the RS-232C) of the attached camcorder peripheral device (computer or printer) in order to enable the corresponding interface in the device. NAGASAWA et al. determines the signal type by using contact 'a' of the jack. However, contact 'a' of the jack is also used for the output of the RS-232C interface.

By contrast, claim 1 as amended calls for "at least one of the plurality of external accessories comprises an earphone having an earphone function" and for "one of the two or more contacts [to be] an analog-to-digital conversion (ADC) contact used **exclusively** for detecting a resistance value of the communicably coupled external accessory". Nothing in NAGASAWA et al. discloses or suggests that NAGASAWA et al.'s jack is an earjack with at least one of the plurality of external accessories comprising an earphone having an earphone function. In other words, NAGASAWA et al. does not disclose that that the jack can be communicably coupled to an earphone so that the earphone can perform an earphone function. Instead, NAGASAWA et al.'s jack is used to communicate data and/or control information.

Further, nothing in NAGASAWA et al. discloses or suggests exclusive use of a contact of the *earjack* for detecting a resistance value of the communicably coupled external accessory. Using a contact exclusively for detecting a resistance value of the communicably coupled external accessory allows for the resistance value of the communicably coupled external accessory to be arbitrarily set instead of being a property of the interface. Thus, the applicant's invention of claim 1 would allow different communicably coupled external accessories to be separately identifiable despite using a common interface/signal type.

Accordingly, the Applicant's independent claim 1 is not anticipated by NAGASAWA et al. at least for the above reasons. Independent claim 4 comprises similar subject matter to that described above with respect to claim 1 and is therefore allowable for similar reasons. Claims 3 and 5 are dependent claims and are therefore allowable for the reasons given above by virtue of their dependence on claims 1 and 4.

III. Rejections under 35 U.S.C. § 103(a) over NAGASAWA et al. (US 6,965,950 B1) in view of HELLBERG (US 6,742,061 B1)

Examiner rejected claims 2 and 6 under 35 U.S.C. § 103(a) as being unpatentable over NAGASAWA et al. (US 6,965,950 B1) in view of HELLBERG (US 6,742,061 B1). Applicant respectfully requests reconsideration of the rejections because NAGASAWA et al. and HELLBERG, neither alone nor in combination, discloses, suggest or render obvious all of the limitations of the claims. Claims 2 and 6 are dependent claims and are therefore allowable for the reasons given above by virtue of their dependence on claims 1 and 4.


Appl. No. 10/727,656
Amdt. dated May 24, 2006
Reply to Office Action of January 24, 2006

IV. Conclusion

In view of the above, it is believed that the above-identified application is in condition for allowance, and notice to that effect is respectfully requested. Should the Examiner have any questions, the Examiner is encouraged to contact the undersigned at the telephone number indicated below.

Respectfully submitted,

Date: May 24, 2006


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